

ROSS STOREY – MUCH MORE THAN A COLEOPTERIST

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Although Ross Storey was widely known as the custodian of the Department of Primary Industries (QDPI) Mareeba Insect Collection and for his Coleoptera taxonomy, it is less well known that he played additional significant roles within the entomology group at Mareeba and the wider community on the Atherton Tableland. This area of far north Queensland, just to the west of Cairns, is unique for its varied rainfall, soil types and elevation across a distance of less than 100 km from north to south. The Mareeba-Dimbulah Irrigation Area, fed from Tinaroo Dam, originally supported the largest tobacco growing area in Australia. This area has subsequently moved over to crops like avocados, bananas, longans, lychees and papaya and is now particularly known for its mangoes. The higher areas around the town of Atherton, with their rich red basalt-derived soils, have long been known for dairying and maize, peanut and potato production. More than 60 different crops are now grown across the Atherton Tableland. Since the early 1980s, when the new QDPI facilities were completed at Peters Street in Mareeba, this centre has been the hub of agricultural research in the district. Several other groups have shared this centre over the past 25 years, including the Queensland Departments of Environment and Natural Resources (which have both undergone numerous name changes), the Northern Australian Quarantine Strategy of the Australian Quarantine and Inspection Service and, briefly, CSIRO. Ross had a particular affection for the Tablelands and Mareeba, which his colleagues will recall he frequently reminded everyone was 'The centre of the Universe'.

When he arrived in Mareeba in the mid 1970s, Ross became part of the team working on pest management in the tobacco industry, which is now completely defunct. Tobacco was not known as the best crop to work in as it wasn't edible, the plants were sticky, there was little shade and insecticide use was considerable. However, it was an industry that saw the benefits of research and funded it accordingly. Ian Cunningham, Ian Titmarsh and Roger Broadley were all heavily involved with tobacco in its heyday and, while Ross may have enjoyed their camaraderie, his experiences with the crop may have contributed to his determination to steer his career towards insect collection and taxonomy. After all, there were few Coleoptera of note in pre-harvest tobacco and Ross was forced to endure study of that well-worked lepidopteran pest '*Heliothis*' (*Helicoverpa*). It was during this time that Ross met up with Geoff Strickland, who was undertaking some collaborative work with Ian Titmarsh (Titmarsh *et al.* 1990). Ross also teamed up with John Rogers in the late 1970s to do some work on lepidopterous pests of the

fledgling lychee industry. They identified 34 species in the crop in north Queensland and aligned these to the specific stages in lychee phenology (Storey and Rogers 1980).

By the mid 1980s, entomological research in north Queensland was moving away from field crops like rice and tobacco and significantly towards horticultural crops such as avocados and mangoes. Two pest groups were identified as being substantial impediments to tree crop production, namely the fruit-piercing moths (mainly *Eudocima* spp.) and the leaf-eating chrysomelids (*Monolepta australis* and *Rhyparida* spp.) (Fay and Storey 1987, Fay *et al.* 1993). The pest species of *Rhyparida* lay within a complex that had received little taxonomic study since the time of Blackburn and Lea. Ross took on the task of developing a taxonomic key for the more than 30 species of *Rhyparida* commonly encountered in far north Queensland. This was of great assistance to those of us working at the economic level by facilitating the correct identification of the main pest species. The reward for Ross was the innumerable unique specimens of Coleoptera he recovered from the several light traps located across the region, set up to look at the seasonal activity of these pests.

In the late 1980s Keith Halfpapp, another of Ross's colleagues in Mareeba, was approached by the nursery industry to work on increasing incidences of sugarcane weevil borer, *Rhabdoscelus obscurus*, attacking ornamental palms in north Queensland. As part of the subsequent project, Ross assisted Keith in documenting the palm species affected by this weevil and this resulted in a well received paper (Halfpapp and Storey 1991), which laid the groundwork for a much better understanding of this pest outside its usual sugarcane environment. At about this same time, Paul Zborowski was employed by QDPI for a collaborative project with CSIRO to look at insect biodiversity as part of Stage 1 of the Cape York Peninsula Land Use Strategy (CYPLUS). Ebbe Nielsen visited regularly from Canberra to join Paul on trips into the Peninsula and then indulged in an odd red wine with Ross on their return. After one trip, Paul and Ebbe had an altercation with a cow on the Kennedy Highway late at night, which left their Landcruiser in need of some major surgery. The CYPLUS project provided a host of unique insect material for both the Australian National Insect Collection (ANIC) and the Mareeba collection and Ross undertook most of the sorting of the Coleoptera.

When the Asian Papaya fruit fly (PFF), *Bactrocera papayae*, was detected near Cairns in 1995, Ross contributed to the fly identification process by looking at material from a range of extraneous traps scattered around the Mareeba area. This provided supplementary information to that gathered from the main trapping network run out of Cairns. After mid 1997, when the last PFF was detected, most of the project work in Mareeba that had been interrupted by the incursion resumed. A new project on two-spotted mites in papaya involved extensive sampling of leaf material from crops to ascertain

levels of mite and predator activity. Ross was given the arduous and repetitive task of counting and recording mites and their eggs, predators and immature stages, which helped build a picture of varietal susceptibility to mite feeding, the importance of soil type and locality, seasonal changes in mite activity and the levels of biological control (Fay *et al.* 2001). Ross had several years earlier identified the different species of the mite-feeding ladybird *Stethorus* on papaya, which helped assign their importance to crops on the wet coast and the Atherton Tableland.



Fig. 1. The Mareeba DPI Entomology group around 1987. L-R back: Geoff Dickinson, Bruno Pinese, Ross Storey, Stefano De Faveri, Harry Fay, Keith Halfpapp. Front: Lorraine Higgins, Ian Cunningham.

One of Ross's more important roles, particularly in the latter part of his career, was handling enquiries from growers, consultants, backyarders and other entomologists about insects or pest problems. The entomology group in Mareeba (Fig. 1) receives several hundred of these enquiries a year and Ross was a valuable buffer, allowing the rest of us more time to focus on our research. Answering the phone with a "Ross here", he presented the cheerful voice not always exemplified by public servants. To have all the skills required to answer enquiries, Ross needed a broad knowledge of treatments for or solutions to pest problems, and this included the complex maze of insecticides that the average applied entomologist deals with. To his credit, Ross was generally able to provide advice at this level and sought the expertise of others if he felt unsure.

Ross had a passion for insects and his collection and was always willing to indoctrinate any budding entomologist with his knowledge. He frequently hosted school groups at QDPI and found it easy to capture the enthusiasm of the younger students. From giant cockroaches and stick insects to the multitude of tiny beetles, Ross had an anecdote for most. It would be interesting to know how many of his visitors took the bait and pursued a career in entomology. Ross eagerly promoted the collection and entomology through the media whenever the opportunity presented itself. Not that many months before his death he did an extended interview with Pat Morrish for ABC [Australian Broadcasting Commission] Far North.

In 1993, Cairns hosted a very successful Australian Entomological Society scientific conference and annual general meeting. Ross did an admirable job as convenor of the Organising Committee. He served as a Queensland Regional Councillor for the society and could always be relied upon to provide news for both *Myrmecia* and the *Entomological Society of Queensland News Bulletin*.

Ross received the North Queensland Award for Excellence from the Australian Institute of Agricultural Science in 1994 for his significant contribution to agriculture in the region and entomology in particular. He authored or co-authored more than 25 papers, not all of which were on Coleoptera taxonomy. With Paul Zborowski he co-authored the best-selling book, *A Field Guide to Insects in Australia*, published by Reed Books in 1995 (Zborowski and Storey 1995). This book was awarded a Royal Zoological Society of New South Wales Whitley Award in the 1996 Best Field Guide category.

Many of us have been put to shame by Ross's substantial contribution to the Mareeba community, despite his limited mobility over the last 20 years. He was a past president of the Mareeba Information and Support Centre and co-founder of the Mareeba branch of the Association of Australian Assistance Dogs (NQ) Inc, serving as a committee member for six years. For a number of years he manned a stall at the Mareeba markets on Saturdays to raise funds for the Assistance Dogs and he regularly persuaded his colleagues to part with a few dollars for raffle tickets to support this cause. After several years funding was eventually sufficient to set up a dedicated training centre on the outskirts of town. Many who knew Ross well would be amused by such devotion to dogs (Fig. 2), as he spent years cursing his neighbour's canine when he was still a town resident in Mareeba.

Ross also served as president of the Mareeba District Flexi Support Association, a group that facilitated assistance to carers of people with disabilities. In 2007, he was awarded the Mareeba Shire Council's Community Service Award for his community involvement and service (Fig. 3).



Figs 2-3. (2, above) Ross and budding Assistance Dog; (3, below) Ross receiving his 2007 Community Service Award from the Mareeba Shire Chairman, Mick Borzi.

Ross liked having people around him and having a chat. Sometime after arriving in Mareeba he met up with Terry Jacobsen, John (the Count) von Nordheim and Peter Cooper (all former QDPI colleagues). Together they formed the Jackie Howe Philosophical Society and, resplendent in their navy blue (Jackie Howe) shearers' singlets and with a drink or two, they discussed all manner of topics, which one can only assume were very deep but increasingly meaningless as sessions wore on. Ross had a view on most things and a tremendous insight into some of the more obscure. He was proud of his Canadian heritage, proud to become an Australian and proud of his many achievements. We salute him for his friendship, his generosity, his enthusiasm, his humour, his courage and his knowledge. He is missed and he will be remembered.

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